

WHAT IS CLAIMED IS:

1. A system for controlling access to a designated area, the designated area having a security device to control access thereto, comprising:

a programmable unit to generate a first and second key for each access to the designated area;

a programming unit to generate an access key using the first key;

a programmable tag to store the access key; and

a validation system including a control unit to generate a validation key using the second key, a memory to store the validation key, and a communication device to establish a data communication with the programmable tag to receive the access key therefrom, the control unit comparing the access key and the validation key and causing the security device to allow access to the designated area if the access key matches the validation key.

2. The system of claim 1, wherein the programmable unit and the programming unit are integrated in a single unit.

3. The system of claim 1, wherein the control unit is a microprocessor.

4. The system of claim 1, wherein the memory is a nonvolatile memory.

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5. The system of claim 1, wherein the communication device includes a transceiver to establish a wireless data communication with a corresponding transceiver included in the programmable tag.

6. The system of claim 5, wherein the transceivers are radio frequency transceivers.

7. The system of claim 6, wherein the validation system includes an antenna for transmitting and receiving radio frequency signals.

8. The system of claim 5, wherein the validation system further includes a proximity detector causing the communication device to initiate the wireless data communication with the programmable tag upon detecting an object outside the designated area.

9. The system of claim 1, wherein the communication device is a programmable tag reader exposed outside the designated area to establish a wired data communication with the programmable tag.

10. The system of claim 1, wherein the validation system includes an input device to enter the second key.

11. The system of claim 10, wherein the input device is a keypad.

12. The system of claim 1, wherein the security device is an electronic lock.

13. The system of claim 1, wherein the security device is a garage door opener.
14. The system of claim 1, wherein, for each access to the designated area, the programmable unit randomly generates an encryption key to be included in both the first and second keys.
15. The system of claim 1, wherein the control unit causes the security device to terminate the access to the designated area after a predetermined period of time.
16. The system of claim 15, wherein the control unit prevents further access to the designated area after the predetermined period of time.
17. The system of claim 1, wherein the control unit includes a clock to determine the time and date of the access.
18. The system of claim 17, wherein the control unit stores the time and date of the access in the memory.
19. The system of claim 17, wherein the communication device transmits to and stores in the programmable tag the time and date of the access.

20. A method for controlling access to a designated area, the designated area having a security device to control access thereto, comprising the steps of:

generating a first and second key for each access to the designated area;

using the first key, generating an access key;

using the second key, generating a validation key; and

comparing the access key and the validation key and causing the security device to allow access to the designated area if the access key matches the validation key.

21. The method of claim 20, wherein the first key generating step comprises the steps of:

randomly generating an encryption key; and

combining the encryption key with a third key.

22. The method of claim 21, wherein the second key generating step comprises the step of combining the encryption key with a fourth key.

23. The method of claim 22, wherein the third key is the address of the designated area and the fourth key is an agent code.

24. The method of claim 23, wherein the access key generating step comprises the steps of:

entering the first key, the agent code, the address, and an access date;

comparing the entered address and the address in the first key; and

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using the encryption key, encrypting the agent code, the access date, and the address if the entered address matches the address in the first key.

25. The method of claim 24, wherein the validation key generating step comprises the steps of:

entering the second key, the agent code, the address, and the access date;
comparing the entered agent code and the agent code in the second key; and;
using the encryption key, encrypting the agent code, the access date, and the address if the entered agent code matches the agent code in the second key.

26. The method of claim 20, further comprising the step of causing the security device to terminate the access to the designated area after a predetermined period of time.

27. The method of claim 26, further comprising the step of preventing further access to the designated area after the predetermined period of time.

28. The method of claim 20, further comprising the step of storing the time and date of the access.

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